

U.S. Patent Application Serial No. 10/699,832
Amendment filed May 24, 2006
Reply to OA dated January 6, 2006

AMENDMENTS TO THE CLAIMS:

Please amend claims 1, 3-5, 10, 12 and 13, as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A ~~monocrystalline gallium nitride localized substrate [[,]]~~ comprising: ~~for an electronic-optical united device used for fabricating an electronic-optical united device mixedly incorporating an electronic device and an optical device, comprising~~ a monocrystalline silicon substrate [:] including:

~~one area having at least one layer, wherein none of the layers of said one area is metamorphosed; and~~

~~another area, comprising:~~

~~a region of silicon carbide formed by locally metamorphosing the monocrystalline silicon substrate into silicon carbide; and~~

~~a layer of silicon carbide metamorphosed by locally carbonizing the corresponding area in the monocrystalline silicon substrate; and~~

~~a region layer of monocrystalline gallium nitride grown on the region said layer of silicon carbide.~~

Claim 2 (canceled)

U.S. Patent Application Serial No. 10/699,832
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Claim 3 (Currently amended): A ~~monocrystalline gallium nitride localized substrate for an electronic-optical united device according to claim 1, said one area further comprising:~~
~~a region layer of silicon nitride formed on the monocrystalline silicon substrate, the region of silicon nitride positioned other than in said region of monocrystalline gallium nitride.~~

Claim 4 (Currently amended): A ~~monocrystalline gallium nitride localized substrate for an electronic-optical united device according to claim 1, said one area further comprising:~~
~~a region layer of silicon oxide formed on the monocrystalline silicon substrate, the region of silicon oxide positioned other than in said region of monocrystalline gallium nitride.~~

Claim 5 (Currently amended): A ~~monocrystalline gallium nitride localized substrate for an electronic-optical united device according to Claim 1, wherein said monocrystalline silicon substrate is an SOI substrate.~~

Claims 6-9 (Canceled).

Claim 10 (Currently amended): A ~~monocrystalline gallium nitride localized substrate for an electronic-optical united device according to Claim 3, wherein said monocrystalline silicon substrate is an SOI substrate.~~

U.S. Patent Application Serial No. 10/699,832
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Claim 11 (Previously presented): A monocrystalline gallium nitride localized substrate according to Claim 4, wherein said monocrystalline silicon substrate is an SOI substrate.

Claim 12 (Currently amended): A monocrystalline gallium nitride localized substrate for an electronic-optical united device according to claim 3, said one area further comprising:
a region layer of polycrystalline gallium nitride grown on the region layer of silicon nitride.

Claim 13 (Currently amended): A monocrystalline gallium nitride localized substrate for an electronic-optical united device according to claim 4, said one area further comprising:
a region layer of polycrystalline gallium nitride grown on the region layer of silicon oxide.